

Abstract of the Disclosure

A method and an arrangement for determining an impact-free extremal set position of an actuating member (1, 5) of an internal combustion engine (10) provides for an increase of the tolerances in the position of the actuating member and a reduction of the requirements on the mechanics of the actuating member and the read-back accuracy for the set position. In the extremal set position of the actuating member (1, 5), an actuating quantity, which is to be adjusted, has an extreme value. In an operating state of the internal combustion engine (10), which is substantially independent of the set position, the actuating quantity is measured with the aid of a sensor (15, 20) for various set positions in a range wherein the extreme value for the actuating quantity is suspected and that set position is determined as the extremal set position whereat the measured actuating quantity has an extreme value.